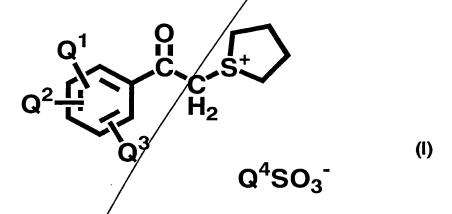


1. A chemically amplifying type positive resist composition comprising a resin which has an alkali-soluble group protected by 2-alkyl-2-adamantyl group or 1-adamantyl-1-alkylalkyl group, and which, per se, is insoluble or slightly soluble in alkali but becomes soluble in alkali by the action of an acid; and a sulfonium salt acid generating agent represented by the following formula (I):



wherein  $Q^1$ ,  $Q^2$  and  $Q^3$  independently represent hydrogen, hydroxyl, alkyl having 1 to 6 carbon atoms or alkoxy having 1 to 6 carbon atoms; and  $Q^4$  represents perfluoroalkyl which may have a cyclic structure.

- 2. The positive resist composition according to claim 1
  which contains the resin in an amount of 80 to 99.9 % by weight, and the acid generating agent, including the sulfonium salt acid generating agent represented by the following formula (I) and another acid generating agent, in an amount of 0.1 to 20 % by weight based on the total solid component weight of the resist composition.
  - 3. The positive resist composition according to claim 1

wherein the perfluoroalkylsulfonate anion represented by  $Q^4SO_3^-$  in the formula (I) has 4 or more carbon atoms.

4. The positive resist composition according to claim 1 wherein the resin has at least one polymerization unit selected from those represented by the following formula (IIa), (IIb), (IIc) or (IId):

 $\begin{array}{c} \begin{array}{c} \begin{array}{c} R_1 \\ CH_2 - C \\ C = 0 \end{array} \end{array} \begin{array}{c} \begin{array}{c} R_3 \\ C = 0 \end{array} \end{array} \begin{array}{c} \\ C = 0 \end{array} \begin{array}{c} C = 0 \\ C = 0 \end{array} \begin{array}{c} C = 0 \\ R_4 - R_5 \end{array} \begin{array}{c} C = 0 \\ R_4 - R_5 \end{array} \begin{array}{c} C = 0 \\ C = 0 \end{array}$ 

wherein  $R_1$  and  $R_3$  represent hydrogen or methyl; and  $R_2$ ,  $R_4$  and  $R_5$  represent alkyl.

- 5. The positive resist composition according to claim 1 wherein the resin contains a polymerization unit having a group cleavable by the action of an acid within a range of 30 to 80% by mole.
- 6. The positive resist composition according to claim 1 wherein 20% by mole or more of the polymerization unit of the resin is represented by the formulae IIa. IIb. IIc or Iid.

Chy Chy

15

Chr.